

REMARKS**Status of the Claims**

Claims 137-157 are pending in the present application, and in the outstanding office action, all of the claims stand rejected as directed to non-statutory subject matter. By this amendment, Applicant amends claims 137 (to include the recitations of claims 139 to 142 and 156) and 143 (to correct a dependency) and cancels claims 139 to 142 and 156. New claims 158 to 160 correspond substantially to previously pending claims 115-120, and claims 134 and 135, with the additional step of offering products to customers. This additional step is described in the specification at pages 17-18 and 30-34. Upon entry of this amendment, claims 137-138, 143-155, and 158-160 will be pending with claims 137 and 158 being independent.

Rejection of Claims 137-157 Under 35 U.S.C. 101

The Examiner states that claims 137-157 are rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter.

Specifically, in the rejection the Examiner states that:

The computer system must set forth a practical application of that § 101 judicial exception to produce a real-world result. Benson, 409 U.S. at 71-72, 175 USPQ at 676-77. The invention is ineligible because it has not been limited to a substantial practical application. A system for determining segmentation of data sets, in which each data set has given characteristics. In addition, the existence of data input means to put data into data sets. And, being able to modify the segmentation of the data sets based of various methods has no practical application. The result has to be a practical application. Please see the interim guidelines for examination of patent applications for patent subject matter eligibility published November 22, 2005 in the official gazette.

In determining whether the claim is for a "practical application," the focus is not on whether the steps taken to achieve a particular result are useful, tangible and concrete, but rather that the final result achieved by the claimed invention is "useful, tangible and concrete." If the claim is directed to a practical application of the § 101 judicial exception producing a result tied to the physical world that does not preempt the judicial

exception, then the claim meets the statutory requirement of 35 U.S.C. § 101. Some claims attempt to reach a practical application by stating the datasets represents customers or products. There exist claims, which represent an association between customers and products, revenue or profit. But there is no real world function or practical application for the invention.

The invention must be for a practical application and either:

- 1) specify transforming (physical thing) or
- 2) have the FINAL RESULT (not the steps) achieve or produce a useful (specific, substantial, AND credible), concrete (substantially repeatable/ non-unpredictable), AND tangible (real world/ non-abstract) result.

A claim that is so broad that it reads on both statutory and non-statutory subject matter, must be amended, and if the specification discloses a practical application but the claim is broader than the disclosure such that it does not require the practical application, then the claim must be amended.

Claims that recite the existence and modification of general abstract data sets without a practical application are not statutory. There must be a result that is a practical application.

Response to Applicant's Arguments

In response to Applicant's prior arguments, the Examiner states:

Applicant's arguments with respect to claims 137-157 have been considered but are moot in view of the new language of rejection.

Applicant notes with concern that this "new language" is the *fourth provision of "new language" in making a section 101 rejection in this case*. After copying Applicant's previous response into the office action, the Examiner states:

Examiner's response:

The 35 U.S.C. 101 rejection stands. There is not a single stated purpose, real world function or practical application which the invention fulfills. Simply having an algorithm for the generation of data sets with each data set further segmented into elements has no stated practical purpose. The applicant cites numerous decisions, which suggests support for the applicant's argument. One example

is 'State St. Bank & Trust Co. v. Signature Financial Group, Inc.' In response to this argument, it is not clear why the appellant cites cases such as State Street Bank when the appellant is clearly distinguishing the real world application of dollar amounts and final share prices of State Street from how the appellant's specification discloses the claimed invention of generating data sets with each set having elements in which no real world application or practical application has been stated. The modification of the data sets provides no real world practical application. They are only data sets which differ from the original data sets. The calculation of 'group associated values' has no stated practical application. They are only values. The generation of a 'metric' which is an 'optimization of the segmentations' has no practical application. The iteration of recalculation of 'group association values' and 'metrics' after segmentation until an optimization criterie has been reached are values only with no practical application. This invention is a numeric exercise only without a real world function or practical application. The invention must have a practical application.

It is clear from the Examiner's rejection that the Examiner has not read the application or the claims. The rejection relates only to independent claim 137 read in a vacuum without reference to the specification or the dependent claims, all of which expressly contradict the Examiner's state bases for rejecting.

For example, the Examiner states that "it is not clear why the appellant [sic] cites cases such as State Street Bank when the appellant [sic] is clearly distinguishing the real world application of dollar amounts and final share prices of State street from how the appellant's [sic] specification discloses the claimed invention of generating data sets with each set having elements in which no real world application or practical application has been stated." These statements are flatly wrong as a matter of fact.

Claim 139 (now amended into independent claim 137) recites that one of the data sets represents customers. Claim 140 (now amended into independent claim 137) recites that one of the data sets represents products. Claim 141 (now amended into independent claim 137) recites that the association values represent an association between the customers and products in the two data sets. Claim 142 (now amended into independent claim 137) recites that the association value that represents an association between the customers and the products represents revenue. Thus, when the system of the claims displays the association values to a user of the system – *it is*

presenting dollar values exactly like State Street. Applicant has further amended claim 137 to include the recitation of claim 156 that a display is provided to present these dollar values to the user.

Practical applications for this technology are numerous, and the system of claim 137 now expressly recites one specific exemplary practical application – associating customers with products according to revenue. Contrary to the Examiner's assertions, *this practical application is described in the specification at pages 17 to 18 and 30 to 34.* In claim 137, the first and second data sets represent customers and products, and the association value represent revenues. In this embodiment, raw transaction data (a customer, the products purchased by the customer, and money paid by the customer for the products) is input, and an optimized segmentation of customer and product groupings is output and displayed to a user, presumably a marketing professional. Segmenting customers and products into groups based upon the optimization of revenue and/or profit is a practical application that marketing professionals would readily understand. In fact, *the Examiner has already noted that “marketing products” is a “useful area.”* (See, December 8, 2005 Office Action at page 3.)

Section 2106 of the Manual of Patent Examining Procedure provides:

The claimed invention as a whole must accomplish a practical application. That is, it must produce a "useful, concrete and tangible result." *State Street*, 149 F.3d at 1373, 47 USPQ2d at 1601-02. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of "real world" value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research (*Brenner v. Manson*, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96); *In re Ziegler*, 992, F.2d 1197, 1200-03, 26 USPQ2d 1600, 1603-06 (Fed. Cir. 1993)). Accordingly, a complete disclosure should contain some indication of the practical application for the claimed invention, i.e., why the applicant believes the claimed invention is useful.

MPEP 2106(IV)(C)(2)((2)) further states:

...USPTO personnel shall review the claim to determine it produces a useful, tangible, and concrete result. In making this determination, the focus is not on whether the steps taken to achieve a particular result are useful,

tangible, and concrete, but rather on whether the final result achieved by the claimed invention is "useful, tangible, and concrete."

The present rejection, in which the Examiner ignores the tangible results provided, fails this test. Following the guidelines enumerated in this section of the MPEP, the result is concrete as it is predictable and repeatable (MPEP 2106(IV)(C)(2)((2))(c)). Each time the claimed invention is used, it will produce customer and product data sets that are ordered into an optimized segmentation according to revenue generation and output that segmentation to display for a marketing professional. The result is tangible as it is a real world result (MPEP 2106(IV)(C)(2)((2))(b)). The result is also useful in that the outputs are specific, substantial, and credible (MPEP 2106(IV)(C)(2)((2))(a)).

New method claims 158-160, which are substantially similar to previous method claims 115 et seq. with the addition of a step of offering products to customers, are likewise patentable. Applicant expressly requests that the Examiner review dependent claims 159 and 160 and not simply reject independent claim 158 without considering the subject matter of the dependent claims as has been done in previous office actions.

CONCLUSION

In view of the above amendment, Applicant believes the pending application is in condition for allowance. If the Examiner believes that further communication would expedite the prosecution of this application, Applicants encourage the Examiner to contact the undersigned attorney.

In the event that a petition for an extension of time is required to be submitted at this time, Applicant hereby petitions under 37 CFR 1.136(a) for an extension of time for as many months as are required to ensure that the above-identified application does not become abandoned.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 141449, under Order No. 106221-4.

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Respectfully submitted,

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